

IN THE CLAIMS

Please amend the claims as follows:

1-11. (Cancelled).

12-14. (Cancelled).

15. (Currently Amended) ~~The method of claim 12~~ A method of  
producing a recording medium containing an information signal,  
comprising:  
\_\_\_\_\_ applying a radiation beam, in response to an information  
5 signal, to a first area of an information layer of a recording  
medium to cause the first area of the information layer to assume a  
first state thereby forming a mark, and  
\_\_\_\_\_ applying the radiation beam to a second area of the  
information layer, before and after the mark, while pulsing the  
10 beam to cause the second area of the information layer to assume a  
second state that is different than the first state, the pulses  
including erase pulses having a erase power level ( $P_e$ ) and a bias  
power level ( $P_b$ ) between the erase pulses, the bias power level  
( $P_b$ ) being in a range between zero and the erase power level ( $P_e$ ),  
15 ~~in which~~ wherein:

the bias power level ( $P_b$ ) increases in the range between  
zero and the erase power level ( $P_e$ ) as the recording speed ( $V$ )  
increases when the recording speed is below a chosen recording  
speed, and

20           the bias power level ( $P_b$ ) is substantially identical to  
the erase power level ( $P_e$ ) when the recording speed exceeds the  
chosen recording speed (29).

16. (Cancelled).

17. (Currently Amended)   ~~The method of claim 16~~ A method of  
producing a recording medium containing an information signal,  
comprising:  
                  applying a radiation beam, in response to an information  
5   signal, to a first area of an information layer of a recording  
medium to cause the first area of the information layer to assume a  
first state thereby forming a mark, and  
                  applying the radiation beam to a second area of the  
information layer, before and after the mark, while pulsing the  
10   beam to cause the second area of the information layer to assume a  
second state that is different than the first state, the pulses  
including erase pulses having a erase power level ( $P_e$ ) and a bias  
power level ( $P_b$ ) between the erase pulses, the bias power level  
( $P_b$ ) being in a range between zero and the erase power level ( $P_e$ ),  
15   wherein the erase pulses have a duty cycle of  $T_e/T_b$ , where  
 $T_e$  is the duration of an erase pulse and  $T_b$  is the time between two  
successive erase pulses, and the duty cycle depends on the  
recording speed ( $V$ ).

\_\_\_\_\_ and wherein in which the duty cycle increases in a range  
20 between nearly zero and unity as the recording speed (V) increases.

18-20. (Cancelled).

21. (Currently Amended) ~~The recording device of claim 18 A~~  
recording device comprising:  
\_\_\_\_\_ a radiation source for applying a radiation beam to an  
information layer of a recording medium;  
5 \_\_\_\_\_ means for moving the radiation beam along the information  
layer; and  
\_\_\_\_\_ control means to control the power of the radiation beam:  
\_\_\_\_\_ for causing a first area of the information layer to  
assume a first state to form a mark in response to an information  
10 signal; and  
\_\_\_\_\_ for pulsing the radiation beam including erase pulses  
having an erase power level ( $P_e$ ) and a bias power level ( $P_b$ )  
between the erase pulses to a second area of the information layer,  
before and after the mark, to cause the second area of the  
15 information layer to assume a second state that is different than  
the first state, the bias power level ( $P_b$ ) being in a range between  
zero and the erase power level ( $P_e$ ), ~~in which~~ wherein:

the bias power level ( $P_b$ ) increases in the range between  
zero and the erase power level ( $P_e$ ) as the recording speed (V)

20 increases when the recording speed is below a chosen recording speed; and

the bias power level ( $P_b$ ) is substantially identical to the erase power level ( $P_e$ ) when the recording speed is above the chosen recording speed.

22. (Cancelled).

23. (Currently Amended) ~~The recording device of claim 22~~ A recording device comprising:

a radiation source for applying a radiation beam to an information layer of a recording medium;

5 means for moving the radiation beam along the information layer; and

control means to control the power of the radiation beam;

for causing a first area of the information layer to assume a first state to form a mark in response to an information  
10 signal; and

for pulsing the radiation beam including erase pulses having an erase power level ( $P_e$ ) and a bias power level ( $P_b$ ) between the erase pulses to a second area of the information layer, before and after the mark, to cause the second area of the  
15 information layer to assume a second state that is different than the first state, the bias power level ( $P_b$ ) being in a range between zero and the erase power level ( $P_e$ ),

wherein the erase pulses have a duty cycle of  $T_e / T_b$ .

where  $T_e$  is the duration of an erase pulse and  $T_b$  is the time

between two successive erase pulses, and the duty cycle depends on the recording speed (V) in which,

and wherein the duty cycle increases in a range between nearly zero and unity as the recording speed (V) increases.

24. (Currently Amended) A recording medium containing an information signal, produced by the method of claim 1215.